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TITLE: APPLICATION OF ECOLOGICAL, GEOLOGICAL AND OCEANOGRAPHIC
ERTS-1 IMAGERY TO DELAWARE'S COASTAL RESOURCES PLANNING

SUBTASK: COASTAL VEGETATION, LAND USE, AND ENVIRONMENTAL IMPACT
MAPPING

PRINCIPAL INVESTIGATOR: DR. V. KLEMAS
COLLEGE OF MARINE STUDIES
UNIVERSITY OF DELAWARE

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E73-11146) APPLICATION OF ECOLOGICAL,
GEOLOGICAL AND OCEANOGRAPHIC ERTS-1
IMAGERY TO DELAWARE'S COASTAL RESOURCES
PLANNING: COASTAL VEGETATION, LAND USE,
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RESULTS

COASTAL VEGETATION AND LAND USE

1. Vegetation map overlays at 1:24000 for all of Delaware's wetlands compiled from NASA aircraft imagery. These maps are used as ground truth for ERTS-1 mapping and by state agencies for wetlands management.
2. Analogue enhancements of wetlands vegetation using General Electric GEMS System and RB-57 Photos. Six major vegetation species were discriminated and mapped, including percentages of minor species.
3. Analogue enhancements of wetlands vegetation and dredge-fill operations using GEMS data processing and ERTS false color composites.
4. Digital, thematic land use and vegetation mapping of entire Delaware Bay area using Bendix Corporation's Earth Resources Data System (first try) and ERTS Digital Tapes.
5. Statistical evaluation of target-group selection reliability using Bendix Earth Resources Data System and ERTS Digital Tapes (first try).
6. Three papers have been published on ERTS-1 coastal vegetation and land use. Five more were prepared on water properties and coastal dynamics.
7. The team is performing wetlands mapping for the State of Delaware. Local and state officials are participating in our ERTS-1 program as co-investigators.